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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,745	12/09/2004	Ewald Bergler	AT02 0032 US	6073
65913	7550	09/16/2009		
NXP, B.V. NXP INTELLECTUAL PROPERTY & LICENSING M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER MALEK, LEILA	
			ART UNIT 2611	PAPER NUMBER
			NOTIFICATION DATE 09/16/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

### Office Action Summary

**Application No.**

10/517,745

**Applicant(s)**

BERGLER, EWALD

**Examiner**

LEILA MALEK

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

**Reopening of Prosecution After Appeal Brief or Reply Brief**

1. In view of the appeal brief filed on 06/02/2009, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options: (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or, (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***Response to Arguments***

2. Applicant's arguments with respect to claims 1 and 5 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (background of invention) and Kojima et al. (hereafter, referred as Kojima) (US 4,646,327), further in view of Hile et al. (hereafter, referred as Hile) (US 2002/0126857).

As to claims 1 and 5, Applicant in the background of invention discloses a data carrier 1 (see Fig. 1), which is designed to modulate a carrier signal (CS) that can be received in a contactless manner (see page 4), and which is equipped with transmission means (2), designed to transmit the carrier signal, and which is equipped with an electrical circuit (3), which circuit is equipped with at least one terminal (4,5), to which terminal the transmission means (2) is connected and via which terminal (4) the carrier signal can be fed to the circuit (3), and which circuit (3) is equipped with a data signal source (9) designed to generate and emit a data signal (see page 5) having only two voltage values (see page 5, lines 9-13), and which circuit is equipped with modulation means (11) designed to receive the data signal and, using the data signal, to modulate the carrier signal occurring at the at least one terminal, and to generate an amplitude-modulated signal (see page 5, line 21) inherently having only two amplitudes (since the signal is a digital signal, the values are (0,1) or (1,-1)), in which amplitude-modulated signal, signal edges occur (see page 5, line 34). Applicant in the background of invention discloses all the subject matters claimed in claims 1 and 5, except that the signal-edge influencing means provided in the circuit, which is designed to influence the slope characteristic of the signal edges in the amplitude-modulated signal. Kojima

discloses a data transmitting-receiving system (see Fig. 2, and column 2, lines 1-4).

Kojima discloses that the data transmitting-receiving device has an input terminal 10 to which digital data from an information source is supplied, a low-pass filter 13 and an amplitude modulator 14 and band-pass filter 15 through which the output of modulator 14, is applied to a transmission line (see column 2, lines 50-60). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Applicant's background of invention as taught by Kojima and add a low-pass filter between the data source and amplitude modulator to correct the distortions in the communication system (see column 1, lines 1-18). Kojima does not expressly disclose that the low-pass filter is designed to influence the slope characteristic of the signal edges, however, since a frequency domain representation of a pulse can be written as follows:  $X(f) = a_0 \sin \omega_0 + a_1 \sin \omega_1 + \dots + a_n \sin \omega_n$ , and the transfer function of the low-pass filter can be

represented as  $H(f) = \frac{1}{1 + j\omega RC}$ , where R is resistance, C is capacitance, when a pulse

passes through a low-pass filter, the filter only passes the frequencies which are in the pass-band of the filter and therefore the output pulse has a slope. As further evidence Examiner would like to call the attention of the Applicant to reference Hile, where Hile discloses a circuit device 300, wherein a signal received at input 330 is shaped prior to driving transistor 340 by a relatively small, relatively low cost low pass filter, including resistor 365 and capacitor 370, preferably designed with a roll off frequency near the design frequency of the sound generator (see paragraph 0023). Hile further teaches that the low pass filter produces a gradual slope to the edges (interpreted as influencing the slope characteristic of the signal edges in the modulated signal) of each pulse of the

signal, while still allowing the frequency range that is desired, to be achieved (see paragraph 0023). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Applicant's background of invention and Kojima as suggested by Hile to perform low-pass filtering on the source signal to improve the quality of the signal (see Hile paragraphs 0005 and 0026) and also avoid sending a signal with sharp edges to the modulator and therefore enhance the performance of the communication system.

As to claims 2 and 6, Kojima further discloses that the signal-edge influencing means 13 is realized by filtration means (see column 2, lines 50-60).

As to claims 3 and 7, Kojima further discloses that the filtration means 13 is provided between the data signal source (not shown, however it is located before waveform shaping apparatus (see column 2, lines 50-60)) and the modulation means 14 and designed to filter the data signal that can be emitted from the data signal source to the modulation means.

As to claims 4 and 8, Kojima further discloses that the filtration means is formed by a low-pass filter 13 (see column 2, lines 50-60).

As to claim 9, Applicant in the background of invention discloses that the circuit (3) is realized as an integrated circuit (see page 4, line 20).

As to claims 10 and 11, Applicant's admitted prior art discloses that the modulation means includes a transistor with a control terminal (see Fig. 1) which directly receives the input signal. Hile shows that the filtration means includes a resistor 365 and a capacitor 370 connected to the ground (see Fig. 3). Hile further shows that both

resistor and capacitor are directly connected to their next circuit element (here resistor 375). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to directly connect the control terminal of transistor disclosed by Applicant's admitted prior art to the capacitor and resistor disclosed by Hile, while incorporating the teaching of Hile in the circuit disclosed in the Applicant's background of invention to connect the components of the circuit properly and to improve the quality of the signal (see Hile paragraphs 0005-0006 and 0026).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leila Malek whose telephone number is 571-272-8731. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Leila Malek  
Examiner  
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/L.M./

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Examiner, Art Unit 2611

/Mohammad H Ghayour/

Supervisory Patent Examiner, Art Unit 2611